

Technical Bulletin #81:

Integrated Pest Management – Yellow Traps to Monitor Virus Vectors

Yellow sticky traps are made of different materials such as plastic bags or yellow containers used for monitoring insect vectors. The yellow color is especially attractive for winged aphids, whiteflies, thrips, leafhoppers and leaf miner adults, thus yellow sticky traps are used to detect these insects before planting and during the early stages of crops that are highly susceptible to virus infection, like Solanaceous (tomato, pepper, eggplant) and Cucurbit crops (bitter gourd, cucumber, squash).

Where should they be placed?

Yellow traps should always be placed in front of live barriers, not inside the crop. They are especially useful when placed two or more weeks before transplant. Ideally, at least one trap should be placed in each border of a planting plot in order to detect incoming vectors. If a high number of incoming winged aphids is detected, the farmer should look for the source of aphids (poorly kept old crops, crop remains, or weeds that maintain aphid reproduction) and should solve the problem before planting, to avoid early virus infection.



A farmer brushes insect glue on a yellow plastic bag to make an insect trap outside of his live barrier. The glue can last as long as a month, then the trap has to be cleaned or replaced.

The height at which yellow traps should be placed is around 1 - 1.2 m, not higher. Use bamboo or wooden stakes to put up the traps. Never put up a yellow trap without glue for it will attract vectors but not kill them. The glue should be placed on both sides of the trap. Ask your HARVEST technician for availability of insect glues.

How many yellow sticky traps should a farmer use?

For home gardens we recommend at least one trap on each side of the plot for cucurbits or solanaceous crops. Because many beneficial insects, like ladybeetles and parasitic wasps, are also attracted to yellow sticky traps, we recommend the trap be taken out if the number of beneficial insects exceeds that of winged aphids trapped.

Learning from the trapped insects

Because the traps are placed two or three weeks before transplanting, they should be checked every day. If virus vectors (aphids, whiteflies, thrips, leafhoppers and leaf



Yellow Trap installed outside of the plot and in front of the live barrier.



miner adults) are found, you can identify from which direction they are travelling based on which trap they are caught on. Insects could be coming from neighboring poorly managed farms, abandoned fields, or from weeds. Once the source is identified, proper control measures should be applied.



Trapped winged aphids



Trapped green leafhopper



Whitefly on yellow trap

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